

Benchmarks

These are the articles published in the Fall 1996 issue.

These pages are meant for use as an archive for the University of North Texas publication *Benchmarks*. Many of these files are old and contain information and links to sites that no longer function. This is because, over time, many sites shutdown or change addresses thus voiding all links to them. Please keep in mind that all links may not work as they should.

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Student Computing Services at UNT and Other Texas Universities

By Maurice Leatherbury, Ph.D., Director of Academic Computing (leatherb@unt.edu)

The [Academic Computing Services](#) department of the Computing Center is constantly working to improve UNT's computing services to the students of the University. In order to determine how our services compare to other large state-supported universities in Texas, a search of some peer institutions' Web sites and catalogs was conducted late in August, 1996, for information about student computing labs, fees for computing, and dial-up computing services. The tables on page 3 and 4 report the results of that study, but it should be noted that the tables may not be totally accurate since the universities' Web data may not be current or complete. A concerted effort was made to gather all of the information available, though.

Compared to peer institutions, the [University of North Texas](#) has extensive and excellently-equipped services for student computing on its campus. Unlike the other state-supported universities that are of UNT's size or larger, we provide most student microcomputers through a large system of general access labs rather than through specially-dedicated labs (to only chemistry students, for example.) Our system makes it easier for students, particularly those who haven't established a major, to have better access to a microcomputer when they need it. In addition, our ratio of students to available microcomputers is lower than all but one of the five largest state-supported universities in Texas. While data on the types of computers in all of the labs weren't available, UNT would undoubtedly compare well with the institutions listed since almost all of our labs' computers are Pentium 90's (or better) or are high-end [Macintoshes](#).

Student-access Computers in Labs

	UNT	U of Houston	Texas Tech	Texas A&M	UT Austin
General access computer labs	13 (+1 graduate student lab)	7	6	6 (20?)	11 (8 are in dorms)
General access computers	600	222	71+ (missing one lab's data)	428** (missing one lab's info)	306
Restricted access computers	437	640	304+	n/a	531
Total student computers	1037	862	411+	1500**	837
Students enrolled 1995	25,114	30,757	24,185	38,654	47,905
Students per computer	24	36	59	26	57

***Texas A&M's undergraduate catalog says that there are "over 20 generally accessible computing labs and help desks on the campus," that "about 1,500 ...microcomputers are strategically located around the campus in facilities that are open to all students," and that "construction has begun on a 600 seat student microcomputer facility", but information on the labs are not available on [TAMU's](#) Web site. The data about the labs shown in the table above were taken from a Web page that says that "a CIS Help Desk is located within each Open Access Computing Lab..." and that lists six such labs.*

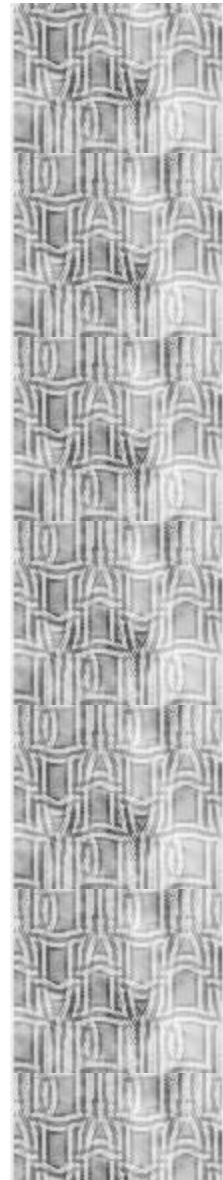
UNT provides its superior computing access services at generally lower fees to students than the other universities. UNT's student computing fees support the General Access Computing Labs, the cost of credit-card registration, and some of the costs associated with the ASSIST telephone registration system and other student registration computing services. Other universities have similar uses for their student computing fees. The data in the table belows show how UNT compares.

Computing Fees

	UNT	U of Houston	Texas Tech	Texas A&M	UT Austin
Student fees	\$4.75 per hr.	\$5.00 per credit hr. to a maximum of \$50.00 per semester	\$5.00 per credit hr.	\$5.00 per credit hr. (\$2.50/hr. in Summer)	\$6.00 per credit hr. + \$5.00 per telephone registration fee
Printing charges	\$0.00	n/a	n/a	0	\$0.10 per page laser printing
Disk storage space	\$0.00	n/a	n/a	0	\$.02/day + \$.02/MB/day over 1

UNT's dial-up access to campus computers and to the Internet have been a point of increased interest on campus recently since the number of free dial-up lines was decreased on August 1, 1996. (See the article "UNT Computing Dial-Up Services" on page 3 for an explanation of that change.) Here, too, UNT compares favorably to other Texas universities in terms of the number of lines that are available. Our charges for the Premium Access lines are roughly comparable to Texas Tech's, but two other peer institutions, the University of Houston and Texas A&M, provide free dial-up, albeit with fewer lines per student than UNT. Here are the data about "Internet" lines into the campuses:

PPP Dial-up Access to Campus



	UNT	U of Houston	Texas Tech	Texas A&M	UT Austin
No. of free lines	64	240	0	240	0
No. of fee-based lines	192	0	126	0	over 1,500
Charge for fee-based lines	\$45/semester in Denton, \$67.50/ Dallas & Ft. Worth	0	\$90/yr. or \$45/semester	0	\$.12/day + \$.02/M B/day for disk storage

The conclusions that one can draw from the tables shown above are that UNT's student computing services are at least as good as other large universities' in Texas, and in general are provided to students at a lower out-of-pocket expense to our students.



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UNT Computing Dial-up Services

By Maurice Leatherbury, Ph.D., Director of Academic Computing (leatherb@unt.edu)

At its May 21, 1996 meeting, UNT's Information Resources Council voted to reduce the number of free dial-up lines into UNT's central computers from 104 lines to 64 lines and to retain the Point-to-Point Protocol (PPP) service on the free lines. This article gives the history of UNT's efforts to provide dial-up access to its computers and a rationale for the current levels of services that remain after the reduction of free lines.

As recently as 1994, UNT's Computing Center provided 48 local and 16 metro dial-up lines to UNT computer users at no direct cost to its users. These lines were used primarily by programming students and statistical researchers who logged into the mainframe or the VAX computers. Users rarely had difficulty in getting a connection through these free lines except perhaps at the end of a semester.

Increased Internet Usage Creates Demands

As more people began using UNT's central computers for things such as E-mail and for accessing the Internet for Gopher and text-based World Wide Web browsing, the existing lines became congested, making it very difficult to make connections to UNT's computers from off campus. While it was becoming increasingly clear that more lines were needed to accommodate the demand, the expense of providing the additional lines prevented a quick solution since the costs were large and there was no source of funds to cover them. A few figures highlight the problem: at the time, a local phone line for the dial-up modems cost about \$18/month, a metro phone line from Dallas or Fort Worth cost a little over \$100/month, and there were significant equipment costs for modems, etc.. The annual telephone line charges alone for the 64 dial-up lines were just under \$29,000.

The [Information Resources Council](#) realized that the University could never afford to provide enough dial-up lines to meet burgeoning demand. Because of the urgency of the problem, the Computing Center increased the number of free lines as a temporary measure in November, 1994, explaining as it did so that some method of permanent funding of the dial-up service would have to be found.

Premium Remote Access Subscriptions and PPP

In March, 1995, the IRC decided to offer the Premium Remote Access Subscription (fee-based) service to students and faculty as a means by which to expand the University's dial-up capability as well as to fund that expansion. The fee for the Premium Access service was calculated to only recover the operating cost of the service: \$190,000 worth of equipment was purchased with state funds to get the service started.

At the same time, however, the IRC voted to provide PPP services on UNT's free dial-up lines. PPP services were a major enhancement to the free lines, enabling users to run graphical World Wide Web browsers and other graphical Internet applications from their home machines. The results of that decision were threefold:

1. demand for access to the free lines continued to skyrocket,

2. the roll-out of PPP doubled or tripled the demand for user support in the Computing Center's Support Services area (the "help desk") and in the Data Communications area, and
3. subscriptions to the Premium Access service fell well below projections and thus haven't recovered the costs of the service.

The Information Resources Council wrestled with this problem at its May, 1996 meeting, and voted on three motions:

1. to drop the free dial-up service completely and use the cost savings to subsidize the Premium Service and thus reduce the Service's cost,
2. to drop PPP support from the free service and reduce the number of lines to the historic level of 48 local and 16 Metro lines, and
3. to retain the PPP service on the free lines but reduce the number of lines to 48 local and 16 Metro connections.

The third motion was approved with the proviso that the effect of that change be monitored during the Summer to determine its impact on users. Cost savings from reducing the number of lines were to go toward covering the increased personnel costs associated with the dial-up lines in general.

UNT Compared to Other Universities

As a result, the number of free dial-up lines was reduced in August 1996. Currently, therefore, UNT has 48 free lines with PPP access in the Denton area, 16 free PPP lines in the Dallas/Ft. Worth metro area, 96 Premium Access Denton lines, and 48 Premium Access lines in each of Dallas and Ft. Worth, for a total of 256 lines. This compares favorably with Texas Tech University's 126 lines and the University of Houston's 240 lines. Texas Tech charges \$45 per semester for a dial-up account (they have no free service) while Houston has no charge for dial-up service. U of H, though, does have a computer use fee of \$50 for everyone taking nine hours or more. The University of Texas at Dallas charges a \$45 per semester computer use fee for everyone wanting access to anything but the campus library system and a \$25 per semester automated services fee. UT Austin charges \$.12/day for dial-up access regardless of whether or not you use it, plus \$.02/day for each megabyte of disk storage for E-mail, etc. UT Austin also charges for computer usage on many of their computer systems.

UNT's Premium Access service currently costs \$10/month for Denton-area lines and \$15/month for Dallas and Ft. Worth lines. The service guarantees that the user-to-line ratio will not exceed seven users to a line. Most Dallas area Internet Service Providers, in contrast, charge \$15 to \$20 per month with no guarantees on service levels.

UNT also has a \$4.50 per credit hour Computer Usage fee whose primary purpose is the support of UNT's General Access Computer Lab system of 14 labs and 500 computers. It also supports credit card registration services, general computing costs for registration processing, the ASSIST phone system, and similar student-oriented computing support. It should be stressed that the Computer Usage fee does not provide any direct support for UNT's dial-up services, either the free or Premium ones.

The provision of dial-up computer access is a problem for universities throughout the United States because of the cost of the service in terms of telephone lines, equipment, and help desk support. Many universities have opted to rely on commercial Internet service providers to provide such access and many haven't advanced yet to providing PPP access to their campus computers at all. UNT has a long history of serving its students' needs for off-campus computing access to its services, and will continue to strive to meet the demands for state-of-the-art connectivity to the Internet for its students.

The expenses of such access, however, will have to be borne at least in part by the users of those services so that UNT can bring the full benefits of academic computing to all students of the University.

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What You Really, Really, Really Need to Know About Computing at UNT

By Douglas Bateman, former Computing Center Support Assistant with contributions by Long Nguyen and David Wright, former Computing Center Microcomputer Consultants. Updated by Helpdesk staff (hdesk@unt.edu) for Fall 1996. *Edited for publication in Benchmarks.*

565-2324

- Memorize it! 565-2324.
Learn it! 565-2324.
- Don't leave your keyboard without it!
- That's 5-6-5-2-3-2-4.

So what is it?

This is the telephone number of the UNT Computing Center Support Services, also known as the [Helpdesk](#). Our mission is to provide support to all faculty, staff, and students at UNT who have any questions and/or problems of any sort concerning computing at UNT. We have primary responsibility for supporting general purpose computing services provided directly by the Computing Center (dialup lines, PPP, use of Jove and Sol, CMS, etc.). We provide a link to Distributed Computer Support areas in the various Colleges, Departments, and Administrative Units. The Distributed Support centers are separately responsible for on-site support and applications support specific to their own areas. We are where you call when you don't know who else to call, or when no one else can help you.

What kind of support?

- Answers.
- Solutions.
- Assistance.
- Hand-holding...well, not quite.

To give you some idea of the types of support we provide, and to answer some of the commonly asked questions we hear at the Helpdesk, I'm going to use a question and answer format. This format is commonly used on the Internet where it is known as a FAQ, i.e. a list of Frequently Asked Questions (with Answers).

1.0 General Questions

1.1 Q: How do I get in touch with you?

A: Did you by any chance skip the first paragraph!?!? Seriously, there are several ways to contact us:

1. Yell really loud.
2. Call us at (817) 565-2324.
3. If you're not having a problem using electronic mail you can send us E-Mail addressed to: hdesk@unt.edu (Internet address).
4. Drop by our office in the Information Science Building (ISB), Room 119. We're open Monday

through Friday, 7am-7pm. No appointment is necessary.

1.2 Q: I have a question about _____ . (Or, where to look first.)

A: First take a look at the inside cover of each issue of *Benchmarks*. There is a LOT of valuable information contained on that one page, and it is virtually guaranteed to be accurate and up to date. You might want to actually read some of the articles, too. *Benchmarks* is a newsletter published by the Computing Center that is available at several locations around campus, including our office. Each issue includes an order form on the back cover for a free subscription.

While thumbing through *Benchmarks*, you may run across a list of Short Courses we offer. These are noncredit (and free!) courses that are conducted every semester and are designed to provide an introduction to, or an overview of, a variety of computing topics. Each course is typically offered on several different dates, to make it easier to work into your schedule, and lasts for about 2-4 hours. The Short Courses are terrific opportunities to get hands-on, personalized instruction in areas of computing that aren't taught anywhere else. Highly recommended.

You'll also want to take a look through the handouts that we provide. During our business hours we keep the most popular handouts in a display case outside the Computing Center's main entrance. I'd recommend starting with the ever-popular "Welcome to the UNT Computing Center." If you can't find what you are looking for, or aren't sure what you should be looking for, feel free to come in and ask one of us. We've got lots more handouts inside. At any point in time, feel free to contact us. (See the answer to question [1.1.](#))

1.3 Q: What kinds of computers do you have at UNT?

A: The snide answer is every kind. The accurate answer is every kind. However, in the arena of personal computers, UNT is oriented predominantly to IBM PC-compatibles. Apple Macintosh and PowerMac computers are currently rising rapidly in numbers, however. There are also some NeXt systems, Amigas, and probably others; but their numbers are too few to have a dramatic impact on campus. We also have some main-frames and super-minis, but you can read about those in our handouts.

1.4 Q: Where can a student go to use a computer?

A: You might think that you should come to us, the UNT Computing Center. That sounds logical, but it's wrong. Well, not entirely wrong...we can give you a pamphlet that shows you where every one of the thirteen General Access Labs are located, their hours of operation, and some general usage rules. (See the General Access Lab information on our UNT Computing Resources page)

1.5 Q: Can I get an Internet account? - or -Where do I go to get an E-mail address?

A: Believe it or not, the answer to the first question is No. There's no such animal as an Internet account. What you can get (if you are faculty, staff, or an enrolled student) is an account on a host system (for example, Jove) that provides you with a connection to the Internet. This also automatically provides you with an E-mail address. At the present time, UNT does not directly charge for these accounts. Contrary to popular belief, you do not have to have a host system account in order to make use of the Internet. Virtually every machine in all of the General Access Labs has some capability for accessing Internet facilities. See Section [5.0](#) for information about the Internet and Section [4.0](#) for information about General Access Labs.

1.5.1 Q: How do I get on the World Wide Web?

A: As mentioned in [1.5](#), you can use any of the machines in the General Access Labs to get on the Internet (and therefore on the Web). To get on the Web from your home computer, you'll need a modem and some software. Read the "How To Get the Software" FAQ for information on what you'll need and where to get it.

1.6 Q: How come you don't support _____ ?

A: Primarily because reality imposes limitations on all of us in one form or another. (Wow, how philosophical! Stay tuned for the nitty-gritty, though.) As human beings, we at the Computing Center have limits on the amount of knowledge we can acquire. (Of course, some of us have a higher limit than others.) UNT has budgetary limits imposed on it that limit the number of people that can be employed, the number and types of computing equipment that can be bought, and even the number and types of software that can be acquired.

What this means is that we are forced to pick and choose what we will support and to what extent we will support things. This is all spelled out in the "Supported Computing Items List," a handout you can get at the Computing Center that is always outdated because of the extremely dynamic field of computing. Some items that we have we guarantee we will support: we always try to get the latest version, answer any and all questions about, and resolve any problems with them. At the other extreme are things that we make available as a convenience to a number of people who want them, but we don't guarantee anything about them. And there are always going to be certain things that we just can't get, don't want to get, and/or can't support if you happen to have them. All that we can do is to try our best to support the vast array of software and hardware that's out there, but you have to be prepared for a negative response in some cases if you have questions or problems. The Computing Center is always open to suggestions and requests, however, so never just arbitrarily give up.

1.7 Q: I've saved everything I've ever written to this diskette that is 3 years old that I carry in the bottom of my book bag. After wiping off the cookie crumbs and removing the lint from it, I put it in the computer but I can't read any of my files. What can I do?

A: Plan a quick trip to Lourdes? We really aren't miracle workers, you know. Well, sometimes we can perform what seem to be miracles, but none of us are applying for sainthood just yet. Uhhh, pardon me a moment while I switch into LECTURE mode. There are 3 ways to prevent this situation from happening:

1. Back up,
2. Back up, and
3. B-A-C-K-U-P! Also, take better care of your diskettes.

The rule of thumb to follow is: "It's not a matter of IF you will lose data, it's a matter of WHEN." OK, lecture mode off.

Seriously, bring your diskette to us and we'll do what we can. Also bring a fresh diskette that we can use to save what-ever we can recover. You might also want to cross your fingers, light a candle, say an incantation, sacrifice a chicken, or whatever you normally do in times of extreme duress. It couldn't hurt, and anything might just help. Frankly, even I get amazed at some of the files we've been able to recover.

Did I mention that it's a good idea to back up your work?

2.0 Applications (Software) Support (Word-processing, Spreadsheet, Database, etc.)

2.1 Q: I'm writing The Mother of All Term Papers and I'm using a word processor from MWPIBTY (MyWordProcessorIsBetterThan Yours), Inc. I need to _____ and I can't figure out how to do it. Can you help me?

A: Questions like this come up all the time. While we would like to know everything about every piece of software ever written, this is just not possible. Because of this, we are forced to limit our guarantee of support to software and hardware that is on our official Supported Computing Items List. (See the answer to [1.6](#)) But this applies only to our guarantee of support. In reality, we will make every attempt that we possibly can to help you, no matter how obscure or obtuse the computing topic. This level of support ranges from Huh? to Oh yeah. I used to use that all the time. Here's what you do... .

2.2 Q: I do all of my writing on my home computer using _____. Can I bring my files to campus and print them here? How?

A: Currently, the predominant word processor available in the General Access Labs is WordPerfect, regardless of the platform you are using (DOS, Microsoft Windows, or Macintosh). Microsoft Word for Windows (or Macintosh) is fast becoming available in most areas as well. Fortunately, both will read files produced by many different applications, or provide conversion utilities that will often do the job. The absolutely first thing to do is to try it out. Don't assume that if we don't have the program you use, that you have to go through a lot of hassles. Often it's as easy as firing up WordPerfect and telling it to load your file. In some cases, you may have to save your file at home in a format that you have found the software in the labs can read. Only when that fails should you take further action. First check with the lab monitor. He or she should know their lab the best. Failing that, contact us. (See the answer to [1.1](#).)

2.3 Q: Someone told me that I can get a free copy of _____ from the Computing Center. - or - Someone told me that since I am a student/faculty/staff I can buy _____ from the Computing Center real cheap.

A: I bet you just wish this were true. Actually, it is! But not to the extent that most people would hope for. For anyone affiliated in some way with UNT, we do own volume discount or site licenses for some software which means all you have to do is supply us with the diskettes for you to get it. We also have some freeware and shareware that we distribute in the same way. And if you are faculty or staff, there are provisions for you to obtain licensed copies of even more software... FOR USE ON UNT-OWNED COMPUTERS. See our software site license Web page for more details (<http://www-lan.unt.edu/HELPDESK/sitelice.htm>).

Free Software for Students/Faculty/Staff, Software, Description

- Procomm Plus 1.1b, An older version of a very popular telecommunications package.
- ZTerm, A simple-to-use telecommunications program for the Macintosh.
- MS-Kermit and Mac Kermit, The personal computer versions of the mainframe/minicomputer telecommunications software. (NOT for the faint of heart!)
- F-Prot, The latest version of virus prevention,, detection, and eradication program for IBM-compatibles.
- Disinfectant or GateKeeper, The latest versions of virus prevention, detection, and eradication



programs for Macintosh computers.

That's it! Not an impressive list but very useful stuff nonetheless.

The UNT Bookstore is the place to go in order to purchase a large variety of software at (greatly discounted) educational prices. For faculty and staff I recommend checking with your department's Software Manager for products that are available to you. I really don't want to make the students jealous in this article.

3.0 Host Systems Support

3.1 Q: What are host systems and why should I care?

A: Nobody says you should care. But if you would like to have access to the Internet from a personal computer off campus, then you definitely want a host system account. (See Section [5.0](#) concerning the Internet.) There may also be some applications that you want to use that are only available on our host systems, e.g. SAS or SPSS on the academic mainframe. Host systems at UNT are the mainframes and super-minicomputers on which you can apply for an account and which allow you to access your account through dial-in modems or from other host systems. Other departments may manage their own host systems (e.g. Computer Science manages the machine known as Ponder); you'll have to contact them for information. The ones that are managed by the Computing Center are shown in the table below.

Common	Primary Domain Name	Used Mainly For:
Jove	jove.acs.unt.edu	Internet access, E-mail
Sol	sol.acs.unt.edu	Special research projects
CMS	vm.acs.unt.edu	COBOL, NATURAL, ADABASE programming & statistics

3.2 Q: How do I apply for a host system account?

A: Come to our office. There is an electronic request form that you need to complete for UNIX systems, and a paper form for mainframe systems that you must complete and turn in to us. For mainframe accounts, you will need to have someone in the department to which you are affiliated (your major department if you are an undergraduate) who is a budget account holder sign off on the application. Check with the administrative assistant in your office or college. If you have an individual (as opposed to a class) account on one of our mainframe host systems already, or you have had one in the not-too-distant past, you will need to complete an Update/Renewal Request rather than a New Account Request. At the present time, you will need to return to our office a few days after submitting your account request to pick up your User ID/Password slip. All requests except for account renewals generate one. (See the next question.)

3.3 Q: What do I do with my User ID/Password slip? What does all of the information that's on it mean, anyway?

A: Keep this slip in a secure and unforgettable place; you may need to refer to it at some future date. The most important information on this slip is your User-ID, a randomly chosen password, and an indication of the system on which you have an account. When connecting to one of our host systems, you will be asked to Login, i.e. the system is asking for your User-ID. Next, you will be asked to enter your password. You must change your password when you first use your account. In fact, it is a very good idea to change your password on a regular basis (like every 30-60 days) and please! treat your password as if it were the PIN code to your checking account. You don't give your friends unrestricted access to your checking account, do you? For information about selecting a good password, and the procedures you follow to change it on our various host systems, come to our office and we will give you a variety of informative handouts.

3.4 Q: I don't have a computer (or modem). Does this mean I can't get an Internet or E-mail account?

A: For those of you (unfortunate ones?) who don't have the equipment yet, all is not lost. There are a number of options open to you:

1. Get real friendly with someone who has a computer and modem.
2. Use the Internet access capabilities of the computers in the General Access Labs.
3. Get a host system account and access it from a General Access Lab for now.
4. Get a LAN (Local Area Network) account from your Department or College (not all offer them - ask). Note: For items 2-4, refer to Section 4.0 for information. By the way, see the answer to 1.5 for instructions on not using the phrases Internet account and E-mail account.

3.5 Q: What programs/ applications can I use on the host systems?

A: Almost all of them, actually. Frankly, if you are used to using software on a personal computer and have expectations of the host systems working the same way, you are in for something akin to culture shock. Host systems typically use operating systems that are far removed from MS-DOS or Macintosh System Software. There are even some folks (politely referred to as mainframe or UNIX jocks) who would argue that true operating systems don't even exist on personal computers. If you are not already familiar with the UNIX operating system, used on Jove and Sol, and/or VM/CMS, used on the academic mainframe, you definitely need to get your hands on our Introduction to _____ hand-outs (see question [1.2](#)) and think about registering for one of our Short Courses (also discussed in the answer to question [1.2](#)). For more information, contact us. (See question [1.1](#)).

If you are already familiar with using host systems, the best thing to do is to contact us if you can't locate a particular application on the system on which you have an account, or you want to find out which system has a particular application so that you can apply for an account on it. (See the answer to [1.1](#).)

3.6 Q: I've forgotten my password and can't get into my account.

A: No problem, IF your account is on a system managed by the Computing Center. Just come into our office, but make certain that you bring some form of identification with you - anything official (no, your Sam's card won't cut it) that has your picture on it. Only extremely rare exceptions are made to the requirement for you to physically appear in our office with a picture ID to obtain a password, and then only under very exceptional circumstances. This is dictated by our security policies (set by the State of Texas) and it is for the protection of your data, as well as that of other account holders on the same system. If your account is on a system that is not managed by the Computing Center, you will have to follow the procedures set by the office or department which manages that system. However, you can contact us to find out who you need to see or where you

need to go.

3.7 Q: How long can I keep my account? Will it expire when I graduate?

A: All individual accounts on mainframe host computers expire on August 31 of each academic year. You may submit a renewal request each August to keep the account active for another year, provided you remain enrolled. Class accounts expire on the last class day of the semester in which the class is held. UNIX accounts typically expire one semester after the last semester that you were last enrolled. There currently are no provisions for former students or alumni to keep their accounts after leaving UNT.

4.0 General Access Labs and Local Area Networks Questions and Issues

4.1 Q: Which lab do I go to? - or - I'm looking for a lab that has ____.

A: Take your pick. Each lab is basically its own independent entity with its own manager, and only one of them actually falls under the auspices of the Computing Center (the ISB 110 lab). There is a central management board that is responsible for generating overall lab policies and procedures, but the types of equipment and software available varies from lab to lab. You can pick up a pamphlet from us or at any of the labs that details the location, hours of operation, and general lab policies. For information about what specifically is available in each lab, you will need to contact the lab manager or one of the lab monitors directly. You may also look at their individual lab web pages from our index.

4.2 Q: Can I get a personal lab or network account?

A: Since the General Access Labs are each managed individually, you'll need to check with the lab manager or a lab monitor there. (See the answer to [4.1](#).) For a Local Area Network(LAN) account, you will need to talk to the manager of the network you want an account on. Now would be a good time to highlight some important differences between host system accounts and Local Area Network or General Access Lab accounts.

1. General Access Lab networks are a special kind of Local Area Net-work; therefore, just about everything that applies to LANs applies to Lab networks. A major difference is that most Labs offer generic accounts that enable any student to use the facilities of virtually any Lab without having a personal account. The primary disadvantage to this arrangement is that you cannot send or receive E-mail since you have no local E-mail address. (See question [4.3](#).)
2. Unlike host system accounts, network accounts are not generally available to students.
3. With rare exceptions, network accounts do not have any dial-in capability, therefore you must be on campus in order to connect to a network account.
4. Some of the UNT library facilities are on LANs and are therefore not accessible from off-campus. Of particular interest to most people is Willis Library's CD-ROM reference collection. However, the library's on-line card catalog system is available from off-campus.

4.3 Q: I want to use E-mail from a General Access Lab. What can I do?

A: If you have a host system account, you can simply log on to your account from virtually any machine in any of the Labs and send and receive E-mail from that account. If you do not have, or do not want, a host system account, your only other choice is a LAN account from your Department or College or their labs. You MUST have a password protected account on SOME computing system, somewhere, to have an E-

mail address.

4.4 Q: I don't get much help from the Lab Monitor. What can I do?

A: In defense of Lab Monitors, there are certain things that they are constrained from helping users with. This has been brought about by instructors wanting to ensure that students are truly doing their own work. Also, keep in mind that Lab Monitors are usually students just like you that are working part-time while going to school. Now, if you still feel that you are not getting the help you should be getting, report the situation to the Lab Manager. You can find out who this is from either the Lab Monitor or by contacting us.

4.5 Q: What can my LAN manager help me with? (This is more applicable to faculty and staff than students, since they are more likely to have an account on a LAN.)

A: The absolutely best way to find out what your LAN manager is supposed to and can do for you is to call him or her and ask. Basically, a LAN manager is responsible for:

1. Anything that has to do with your network account. Examples are: for getting your password, inability to login, inability to run software from the server, etc.
2. Getting a new computer connected to the network.
3. Configuring your computer so that it will work properly as a workstation on the network.
4. Answering questions or resolving problems with any of the above. The Helpdesk staff are trained to recognize questions and problems that are best resolved by your LAN manager and can direct you to the appropriate person. If you are unsure of whom to call, you can always call us.

5.0 Internet Questions and Support

5.1 Q: What is the Internet?

A: You may have been reading lately about the Information Superhighway. Well, that's what the Internet is not! What it is, is a network of networks.(Clear as mud, right?) Put another way, it is a collection of many thousands of computers around the world that are connected in such a way that they can communicate quickly and efficiently with one another. This inter-communication that takes place among all the computers connected to the Internet is what moves your E-mail from point A to point B, transports the latest postings to a variety of discussion groups, transports and delivers information from a variety of information services that users can subscribe to, and makes available vast quantities of information in the form of files that you can download and documents (even entire books) that you read on-line. And it is much more.

5.2 Q: How do I learn to use the Internet?

A: You can't really hurt anything by just jumping in and learning by trial and error, but you will probably miss out on a lot of things that way. If you have a friend who is conversant in Internet-ese, have them give you some instruction. Get one of the tons of books about the Internet published in the past year. Which one is best? Whichever one works the best for you; it's your call on this one... the more recent, the better (these books are technically obsolete before they are printed). In addition, see the answer to question [1.1](#) for sources of information and help.

5.3 Q: What can I get to on the Internet? - or - What can I do on the Internet?

A: Just about anything you want. My favorite expression is If you have an interest in some particular field or area, there is most likely information about it on the Internet; the trick is finding it. The first thing you'll

want to do is learn how to use the Internet. (See the previous question.) There is just so much available that it is impossible to list everything, a task made even harder by the dynamic nature of the Internet. Have fun exploring! One caveat though. While the Internet may seem like a hodgepodge of cultures, ideals, morals, etc., there are actually rules that govern its use, albeit rules that are primarily enforced by the users themselves. These rules take the form of Internet etiquette, or Netiquette, and are largely learned through mistakes. Believe me, Internet users are not shy about letting novices know when they have breached one of the rules of Netiquette! Some of these rules can be found posted to certain news-groups such as news.answers and news.announce.newusers. (This is where the books on the Internet can be very handy.)

5.4 Q: How do I get to the Internet from my computer at home?

A: The answer depends on what you intend to do and what you want to see when you connect to the Internet. For those of us that are happy with a text-only (or Terminal Mode) connection, all you need is Procomm Plus or ZTerm, which you can get from us at the Computing Center (as mentioned in [2.3](#)). If you're the upstart type, requiring graphics, sound and the like, you'll want to use Netscape or Internet Explorer. You can get these as part of the UNT PPP software package, which you can learn more about from the "How To Get the Software" page (<http://www-lan.unt.edu/HELPDESK/faq/dlswfaq.htm>).

5.5 Q: I have a ____ account. What is my Internet (or E-mail) address?

A: Start with your User-ID and add the following to it: If your account is on one of these systems, add this:

- Jove, @jove.acs.unt.edu
- Sol, @sol.acs.unt.edu
- CMS, @vm.acs.unt.edu
- ACSLAB, @acslab.unt.edu

For example, if my user ID is ZZ99 (which it isn't), and I have a Jove account, I would tell everyone to send me E-mail addressed to: zz99@jove.acs.unt.edu (notice the lower case . UNIX is case sensitive!!!).

5.6 Q: I have a boyfriend/girlfriend/just-a-friend/significant-other that's going to school somewhere else. Can you help me find his/her/its E-mail address?

A: Congratulations! You have just asked the one question that is both the easiest and hardest question to answer. The easy answer is Telephone him/her/it and ask them for the address. The hard answer is, Good luck! There are several approaches that can be taken, too numerous to go into here, primarily because you may need to try every one of them before you find the address, and none of them is guaranteed to be successful anyway. The best thing to do is bring this problem to us in person. We won't necessarily do the work for you, but we will certainly show you how to go about it.

5.7 Q: I have friends who use some E-mail program on a Brainiac-5 at their school. Will they get E-mail I send them or do I need to use the same program and type of machine?

A: Thankfully, yes they will get your E-mail, and no you don't have to be using the same software or type of machine. A set of standard languages was developed some years ago that allows computers on the Internet to communicate with one another. At each end of a connection, the local computer is responsible for translating from the language it understands to one of the standard languages and vice versa. The real term for these languages is protocols. Your local system chooses to translate its protocol to the appropriate Internet protocol depending on what functions are being used. For example, E-mail uses one protocol, news uses another, ftp still another, etc. Bottom Line: As long as you are using the Internet, mail is mail the world around.

And finally, the most important question of all!

Q: What can I do to make your job of supporting me easier?

A: Uhhhh, money can do wonders for support. Seriously, there are some things that you can do that may seem rather insignificant to you, but could go a long, long way towards making our jobs easier and us happier (and a happy consultant is a helpful consultant!):

1. Demonstrate at least a little effort in learning the terminology. We don't expect anyone to become the techno-geeks that we typically are, but it sure helps when we don't have to search for different ways to refer to things that we are familiar with.
2. Please try to be patient with us. We're only human (really, we are!) and we have our bad days, trying moments, and mid-term exams just like everyone else. However, I would be willing to match our service and support attitudes to any other campus office, even on our worst days. We try that hard to be helpful, understanding, and friendly.
3. Demonstrate appreciation for our efforts. We lap this kind of stuff up! Even a brief smile and a quick (but sincere) Thanks goes a long way with us.
4. Remember your User ID. Remember your password. Protect your password. Know at least the name of the system you have an account on. And please, keep multiple backups of all your really important files. Have fun this year! Work hard, but certainly enjoy your time here, and Happy Computing. . .

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Help Desk FAQs on the Web

Consult the Help Desk FAQ page (<http://www-lan.unt.edu/HELPDESK/faqindex.htm>) for the latest in Frequently Asked Questions. The current "Top Ten Most Frequently Asked Questions" - with answers - are:

1. How to Download and Upload files to/from Jove to a PC over the Dialups.
2. Same as above except using WS_FTP graphical interface.
3. What to Do When the Message "Over quota on /export/jove" Appears.
4. Sending E-mail to the Internet from Word Perfect Office Mail (3.1).
5. Why Can't I Access Gopher or WWW from the UNT Dialup Menu?
6. Printing a Message from Jove/Sol E-mail to a Printer at Home.
7. How Would One Go About Accessing the World Wide Web?
8. How Do I Turn Off Call Waiting Before I Dial in to UNT's System?
9. Using UNT's Anonymous FTP Server.
10. Getting Better Performance from Kermit on Jove/Sol.

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UNT's Internet Connection

This is a slightly edited announcement that was placed on the [unt.networking](#) newsgroup on September 26 by Bill Buntain, Director of Network and Microcomputer Support.

My staff has faxed a copy of a contract to the [Texas Department of Information Resources](#) (DIR) to switch our Internet connection from the [Texas Higher Education Network](#) (THENet) to a DIR router in Dallas. We believe this change will result in a significant improvement to both the performance and the general reliability of our Internet access. It also has far greater growth potential than our existing configuration. The new service will be deployed as quickly as equipment and circuit procurement can be accomplished.

Our present Internet connection is a single T1 circuit from the UNT campus to [UT-Dallas](#), from which it is relayed over redundant T1 circuits to the THENet hub in Austin. From there THENet connects to [SprintNet](#). This design has two basic problems. First, there are multiple single points of failure which can result in a complete or significant outage of our Internet access beyond the T1 circuit between here and UTD. Second, our traffic is aggregated with other subscribers on the links between UTD and Austin, potentially resulting in degradation of performance due to contention for a limited resource.

For the past few months many Internet providers, including major ones such as SprintNet which provides the Internet connectivity for THENet, have been experiencing overloads. In addition, the THENet/SprintNet connection has been unstable on a number of occasions. The solution we are implementing with DIR will provide us with dual T1 connections into a 100 Mb/sec FDDI ring in Dallas which in turn is connected to multiple major Internet access providers. This should boost our available bandwidth significantly and provide us with a much greater level of fault tolerance.

Check [unt.networking](#) for further announcements on this topic. - Ed.

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Instructional Technology Services

By Jenny Jopling, Interactive Learning Consultant (jopling@unt.edu)

Did you know that [Academic Computing](#) has an Interactive Learning Team (ILT) offering instructional technology services to faculty members? The team is available to help you integrate technology with teaching and I am the team leader.

Whether it be a phone consultation, project assistance, or software training, they will help you reach your technological teaching goals. ILT services include:

- **Consultation**
- **Instructional Design**
- **Program Design**
- **Programming**
- **Production Coordination and Scheduling**
- **Hardware and Software Research and Specification**
- **Delivery Medium Selection**
- **Scanning**
- **CD-ROM Production**
- **Video Digitization**
- **Software Training**
- **Web Development**

The ILT can be reached at 565-4462 or E-mail jopling@unt.edu. Check out our homepage at www-lan.unt.edu/INTERACT/ to see what's happening around campus with classroom and distance learning technologies. There's more than you think!

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On-Line Services for Student Organizations at UNT

By Dr. Philip Baczewski, Assistant Director of Academic Computing (baczewski@unt.edu)

[Academic Computing Services](#) provides several kinds of support to meet the on-line communications needs of student organizations. Academic Computing provides these services at no cost to student organizations. To take advantage of these services, your organization must be registered with the UNT Student Association. A brief description of on-line services is included here. For additional information about any of these services, contact the Computing Center [Help Desk](#) at 565-2324 (helpdesk@unt.edu).

Electronic Mail

Academic Computing can set up an electronic mail alias to serve as the address for all E-mail coming to your organization. The alias will route incoming mail to a designated member or members of your organization, usually an organization officer. The address will be in the format ***organization_name@unt.edu***. ***Organization_name*** can be a suitable abbreviation, if the full name is too long to be an E-mail address. Once the alias is enabled, mail sent to the organization's address will be forwarded to an existing E-mail account owned by the specified officers or members. If needed, Academic Computing can provide technical assistance in setting up a mail filing procedure to keep all organization mail separate from an officer's personal mail. For more information about setting up an E-mail address, contact Marc St. Gil (mstgil@unt.edu) or just send E-mail to postmaster@unt.edu.

Organization Mailing Lists

Academic Computing can create an electronic mailing list of your organization's members that you can use to send electronic mail announcements and information to members of your organization. Once the list has been created, a designated officer in your organization can maintain the list, adding or deleting mail addresses as needed. To set up a mailing list, contact Marc St. Gil (mstgil@unt.edu) or just send E-mail to postmaster@unt.edu.

USENET News Groups

UNT supports local USENET news groups for the purposes of posting announcements and conducting on-line discussions on various topics. Student organizations can request the creation of their own news group, which will be viewable only by UNT students, faculty, and staff. Newsgroup names for UNT organizations are in the format ***unt.org.organization_name***. ***Organization_name*** can be a suitable abbreviation, if the full name is too long to be a news address. If you wish to set up an organization news group, contact Bahram Paiani (bahram@unt.edu) or just send E-mail to news@unt.edu.

Organization Web Pages

Academic Computing is providing space on UNT's central World Wide Web server specifically for UNT student organizations. You are responsible for developing all Web page content. Once your page has been loaded on the server, your organization's Web page will be part of the official

information offered via UNT's campus-wide information system. For more information about creating an organization Web page, contact Doug Bateman (dbateman@unt.edu) or just send E-mail to www@unt.edu.

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New Classes for Statistical Programming in SPSS and SAS

Karl Ho, Research and Statistical Support Manager (kho@unt.edu)

This semester we have begun to offer a new series of short courses on statistical programming and computer research tools. The changes in class structure are to accommodate the upgrade or improvement in the computing resources on campus, hardware and software alike. For the former, we have more powerful microcomputers most of which are at least 486's in the computer labs now while the centralized host systems including the IBM mainframe and the UNIX machines have had major upgrades over the summer 1996. On the other hand, we have also had upgrades in both of the centrally supported statistical packages, namely SPSS and SAS, that work under basically all operating environments on campus.

Given these changes, we not only redesigned the course structure to take into account the new computing resources but also to better cater for the needs of UNT researchers. With the seven new courses, we aim at providing a program that allows both flexibility and variety for users at different levels of programming experience. The computer tools class (see below), for instance, is designed to introduce to both beginning and experienced researchers the powerful utilities for handling and manipulating data for analysis. While introductory classes in SPSS and SAS are prepared for new users, hands-on programming workshops are available for veteran users. All classes are provided with course materials and sample programs and they are **free**!

The following provides a more elaborate description for each of the seven classes. Course schedules can be obtained from the Computing Center main office, ISB 119, or found at the Research and Statistical Support Homepage (<http://www-lan.unt.edu/RSS>).

▪ Computer Tools for Research and Data Analysis

This course is designed to familiarize researchers with the UNT computing environment and available computer tools for research and data analysis. Primarily, it encompasses four areas as follows:

1. Data Collection and Entry
2. Data Storage and Transferral
3. Data Analysis
4. Data Exposition

In this course, you will learn how to:

- collect and enter data using computer
- identify different data formats
- import data for statistical analysis
- compress data for storage
- examine data graphically

Prerequisite Skills

No prior programming knowledge is required but it is preferable to have background knowledge in file structures and system commands on one of the following operating systems:

DOS, Windows, UNIX, or CMS.

Duration: 3 hours

■ Introduction to SAS Programming

First in the SAS series, this is a foundation course that introduces the basic programming techniques using SAS to accomplish typical data processing tasks. This course is a starting point for those who want to develop SAS programming as their primary research tools.

In this course, you will learn how to:

- start a SAS session using display manager system
- prepare data for analysis
- read in raw data using SAS data step
- manage data using library, file and catalog systems in SAS
- modify (recode) data for analysis
- summarize and analyze data using simple procedures

Prerequisite Skills

No prior programming knowledge is required but it is preferable to have background knowledge in file structures and system commands on one of the following operating systems: DOS, Windows, UNIX, or CMS.

Duration: 3 hours

■ Workshop in SAS Programming I

Second in the SAS series, this course builds on the concepts presented in the Introduction to SAS Programming course with emphases on running SAS under different operating systems and environment. It covers running the components of typical SAS programs using different interface system and how the DATA step processes data and builds SAS data sets. SAS programming skills and efficiency will also be covered. Beginning SAS users are recommended to take the Introduction course before taking this one.

In this course, you will learn how to:

- run SAS programs in batch and interactive mode
- run SAS on GUI systems like Windows 3.x
- run SAS on remote systems like CMS, MVS, and UNIX
- write DATA and PROC steps
- create SAS data sets from external files
- understand SAS programming logic
- understand error messages in the SAS log and debug your SAS programs

Prerequisite Skills

Two conditions should be met for taking this class:

1. Completion of Introduction to SAS Programming course; and
2. Completion of either Introduction to CMS or Introduction to UNIX.

Previous SAS programming experience will be helpful. Applicants should be aware that this second level course requires basic knowledge of both SAS programming and the operating system.

Duration: 3 hours

■ Workshop in SAS Programming II

This course is designed for experienced SAS users who want to apply SAS programming skills to their research project and data analysis. It focuses on the hands-on exercises of data manipulation, advanced data analysis and statistical modeling.

In this course, you will learn how to:

- prepare your own data into SAS data set(s)
- handle huge data sets (100 MB)
- subset data into smaller data sets
- transport data sets across different platform
- apply statistical procedures including ANOVA, MANOVA, T-test, Multiple regression, Factor analysis, etc.
- run interactive analysis using SAS/LAB and SAS insights
- expose data in two- and three-dimensional graphs

Prerequisite Skills

Before selecting this course, you should complete the Workshop in SAS Programming course or have experience SAS programming. Applicants are recommended to bring their own data sets even though sample data will be provided.

Duration: 3 hours

■ Introduction to SPSS Programming

First in the SPSS series, this is a beginning course that familiarizes users with basic programming techniques in SPSS for basic data processing tasks. This course is a starting point for those who want to use SPSS as primary tool for data analysis and data management.

In this course, you will learn how to:

- start an SPSS session in DOS/Windows 3.x
- prepare data for analysis
- read in raw data using SPSS data list command
- manage data using different SPSS file formats
- transform (recode) data for analysis
- summarize and analyze data using simple procedures like DESCRIPTIVES, CROSSTABS and FREQ.

Prerequisite Skills

No prior programming knowledge is required but it is preferable to have background knowledge in file structures and system commands on one of the following operating

systems: DOS, Windows, UNIX, or CMS.

Duration: 3 hours

■ **Workshop in SPSS Programming I**

Second in the SPSS series, this course builds on the concepts presented in the Introduction to SPSS Programming course with emphases on using SPSS under different operating systems and environment. It covers the typical SPSS procedures, advantages of running SPSS in different interface systems. SPSS programming skills and efficiencies will also be covered. Beginning SPSS users are recommended to take the Introduction course before taking this one.

In this course, you will learn how to:

- run SPSS programs in batch and interactive mode
- run SPSS on GUI systems like Windows 3.x
- run SPSS on remote systems like CMS, MVS, and UNIX
- create SPSS data sets from external files
- understand programming logic
- transport SPSS data set across different platforms (Windows, UNIX, CMS, MVS and Mac)

Prerequisite Skills

Two conditions should be met for taking this class:

1. Completion of Introduction to SPSS Programming course; and
2. Completion of either Introduction to CMS or Introduction to UNIX.

Previous SPSS programming experience will be helpful. Applicants should be aware that this second level course requires basic knowledge of both SPSS programming and the operating system.

Duration: 3 hours

■ **Workshop in SPSS Programming II**

This course is designed for experienced SPSS users who want to apply SPSS programming skills to their research project and data analysis. It focuses on the hands-on exercises on data manipulation, advanced data analysis and statistical modeling.

In this course, you will learn how to:

- handle huge datasets (100 mb)
- subset SPSS system file or data into smaller data sets
- transport data sets across different platforms
- apply statistical procedures including ANOVA, MANOVA, T-test, Multiple regression, Factor analysis, etc.
- expose data in two- and three-dimensional graphs

Prerequisite Skills

Before selecting this course, you should complete the Workshop in SPSS Programming course or have previous experience SPSS programming. Applicants are recommended to bring their own data sets even though sample data will be provided.

To ensure your enrollment, we strongly recommend you to register early so the instructor can customize lab sessions and materials according to the class size. Please don't hesitate to contact us if you have any question that pertains to any of the short courses listed above (call 565-4066 or kho@unt.edu via E-mail).

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Internet Tutorials for Non-Computer Classes

By [Randal Milholland](#), Documentation Assistant (randy@unt.edu)

One of the hardest things about college, or at least it was for me during my first semester, was having to go to a teacher for tutorials. No one wants to spend more time in a classroom than they have to. Also, you better hope your teacher remembers you were coming in or didn't get sick. Luckily, the World Wide Web is home to many educational resource pages, and although this isn't necessarily as good as a human teacher (ever try asking a web page to explain something slower?), these sites are good for extra help in classes that might cause problems.

Also, many of these pages have links to take you to more pages. Don't forget to try various search engines, especially [Alta Vista](#) or [Lycos](#).

- **Math Tutorial** - http://hobbs.leesummit.k12.mo.us/Projects/CompSci/math_tutorial/Title_Page.htm
- **Math Archives** - <http://archives.math.utk.edu/>
- **Calculus Tutorial Proof-of-Concept** - http://zariski.math.uic.edu/~fields/calc_tutorial/
- **Polymer Chemistry Hypertext** [old page] - <http://www.umn.edu/~jstoffer/CHEM381/index.html>, [new page] - <http://www.umn.edu/~wlf/>
- **Art's Chemistry/Biochemistry Homepage** - <http://www.unm.edu/~cs1551ct/softlist.html>
- **Chemistry** - <http://abaco.uam.mx/links/quimica.html>
- **Chemistry Resource Page** - <http://www.surreycmc.gov.uk/iproject/schools/strodes/pages/chemref.htm>
- **Yahoo! Reference: Scientific Constants** (A full listing) - http://www.yahoo.com/Reference/Scientific_Constants/
- **Tom Potter's World** - <http://www.cqws.com/users/tpotter/tom.htm>
- **Upper Ocean Physics as Relevant to Ecosystem Dynamics** - http://popeye.uchicago.edu/reprints/eco_apps95/ecosys_ToC.html
- **Physics Tutorials** - <http://www.physics.uoguelph.ca/tutorials/>
- **Cell and Molecular Biology Online** - <http://challenge.tiac.net/users/pmgannon/teaching.html>
- **Biology Related Files and WWW Servers** - http://ifcsun2.ifisiol.unam.mx/html/biology_related.html
- **Basic Spanish for the Virtual Student** - <http://www.umn.edu/~amigos/Virtual/>
- **UCD Russian Resources** - <http://gallant.ucdavis.edu/russian>
- **Russian - English - Russian Dictionary** - <http://www.elvis.ru/cgi-bin/mtrans>
- **The Internet Public Library** - <http://ipl.sils.umich.edu/>
- **BIBLIOMANIA, The Network Library** - <http://www.bibliomania.com/>
- **Monta Vista Curriculum Resources** - <http://www.mvhs.edu/curriculum/science.html>
- **Johnson's Astronomy Tutorial** - <http://michele.gcccd.cc.ca.us/~ljohnson/tutor.html>
- **Astronomy Tutorial** - <http://altair.syr.edu:2024/SETI/TUTORIAL/tutorial.html>
- **The Elements of Style** - <http://www.columbia.edu/acis/bartleby/strunk/>
- **On-Line English Grammar** - <http://www.edunet.com/english/grammar/index.html>
- **The Learning Centre** - <http://www.edunet.com/langs.html>
- **Five Tools for Writing Timed Essays** - <http://splavc.spjc.cc.fl.us/hooks/hooksessay.html>
- **The Grammar Doctor** - <http://w3.one.net/~sparks25/gdoctor.html>
- **The Encyclopedia Mythica** - <http://www.webcom.com/myth/>
- **Knowledge Adventure Encyclopedia** - <http://www.adventure.com/library/encyclopedia/>



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Academic Mainframe Upgrade News

By [Dr. Philip Baczewski](#), Assistant Director of Academic Computing (baczewski@unt.edu)

The Academic mainframe systems upgrade begun last spring is complete. MVS/SP has been replaced with MVS/ESA. VM/CMS has been upgraded to VM/ESA version 2.1.0 and CMS version 12. As a result of the MVS upgrade, a small change is required on all MVS JCL JOB statements used to submit batch jobs from CMS. A USER parameter must be added somewhere on the JOB statement. For example, the following JOB statement...

```
//IDNNPRGM JOB (IDNN,:05,1),myname,PASSWORD=secret
```

...would need to be rewritten as follows:

```
//IDNNPRGM JOB (IDNN,:05,1),myname,PASSWORD=secret,USER=IDNN
```

The ID following "USER=" should be the same as your MVS batch User-ID. If there is not enough room to include all information on one line, the JOB statement can be split into two lines:

```
//IDNNPRGM JOB (IDNN,:05,1),myname,
```

```
// PASSWORD=secret,USER=IDNN
```

Note that the first line of the statement ends with a comma and that there is at least one space following the two slashes on the second line of the statement.

If you have any questions about the Academic Mainframe upgrade, you can contact Computing Center Support Services at 565-2324 and ask to speak to an Academic Mainframe consultant.

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Academic Mainframe Software

By Cathy Hardy, Academic Database Consultant (ac55@vm.acs.unt.edu)

Over the summer of 1996, the academic side of the IBM 9672 mainframe saw some software changes. Some of the previous software had been waiting to be upgraded. Upgrades and changes are scheduled between times of heavy usage whenever possible, so the week or two between spring semesters and summer semesters, and the couple of weeks between summer semesters and fall semesters are very busy for the Computing Center.

Current Academic System - Fall 1996

List of products on the **Academic MVS/ESA** system.

Product	Release
MVS/ESA	4.3
SP JES2	4.3
ASSEMBLER H	2.0
COBOL II	3.2
VS/COBOL	2.4
FORTRAN IV G	2.1
FORTRAN IV G1	2.0.1
PL/I	5.1
COM-LETE	4.6.2
CA-1 (TMS)	5.0
CASORT	6.6
SAS	6.08
includes:	
STAT	
ETS	

List of products on the **Academic VM/ESA** system.

Product	Release
VM/ESA	2.1.0
includes:	
REXX	
CMS	
VTAM	4.2.0
CMS/MVS Toolkit JES2 Interface (J2)	3.2
CSP	1.3.0
DITTO	3.2.0
EREP	3.5.0
ESSL/370	1.2.0
GDDM/VM	3.1.1
High Level Assembler (HLASM)	1.2.0
IBM COBOL	1.1.0
ISPF/PDF	3.2.0
OS PL/I	2.3.0
PL/I and C Common Library Library	2.1.0
PL/I for MVS and VM	1.1.1
QMF	3.1.0
REXX/370 Compiler land Library	1.3.0
RSCS	3.2.0
SAS for CMS	6.08
SELF-TEACH ONLINE XEDIT TUTOR	
SPSS/X	4.1
SQL/DS	3.5.0
SYBACK	2.4
TCP/IP	2.3.0
VM Batch Facility	1.2.0
VM/DIRMAINT	1.5.0
VS COBOL II	1.4.0
VS FORTRAN	1.4
VS FORTRAN	2.3
VS FORTRAN	2.6.0
VS PASCAL	1.2.0

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Syback

By Cathy Hardy, Academic Database Consultant (ac55@vm.acs.unt.edu)

How many times have you accidentally deleted a file that you REALLY need? Was it there (on your 191 mini disk before the last daily backup? Good news! You can restore your file! It's easy...

Type SYBLIST at the CMS Ready prompt and the Syback menu will pull up. The menu will pull up with defaults of your CMS userid and 0191 disk, and the latest backup. You may change the disk if you have more than one, but you can only restore your ID. You may change the backup date, but you'll probably just want to look at the latest backup. Hit < PF4 > to see the files backed up and use < PF9 > to mark a file (or files) to be restored. Then hit < PF12 > to go to the restore destination menu. The restore destination defaults to your rdrlst, an excellent place for a file to park until you know that's the one you wanted. < PF2 > will submit the restore job and you will see messages from syback when the job starts and finishes. Something like this:

SYBMON: MON111 JOB00065 SYBACK SYSIN queued

SYBACK: 11:11:02 SHL216I SYBACK Job Started

and then:

SYBACK: 11:15:20 SHL218I

SYBACK Job Ended - Return Code = 0

SYBACK: 11:15:20 SHL219I All tasks completed successfully

Now you can look in your rdrlst and find your file(s) and 2 files from syback giving information on the restore job like the time it ran, what tape drives were used, etc. If you are happy with your file, RECEIVE it to your filelist and you can discard the 2 syback files from your rdrlst. Now all you have to do is try to remember all those changes you made to the file since the backup....

To see a help file on SYBLIST, type **HELP SYBLIST** at the CMS Ready prompt.

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ACM

The UNT Association of Computing Machinery has a Web page now: <http://www.cas.unt.edu/~acm>
Meeting times and places will be posted on that page periodically.

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Internet Resources on CMS

By [Dr. Philip Baczewski](#), Assistant Director of Academic Computing (baczewski@unt.edu)

Internet tools are not new to the VM/CMS Academic Mainframe environment. For a number of years, we have been able to use FTP to transfer files and we've been able to connect directly to CMS using a TN3270 program under DOS, [Windows](#), or [Macintosh](#). The use of these basic Internet tools is documented in the "Introduction to CMS" handout available from [Academic Computing Services](#) in ISB 119. What you may not realize, however, is that there are Gopher, USENET News, and World Wide Web programs on CMS as well. We don't necessarily recommend CMS as your primary Internet access point, especially if you have access to an Internet-accessible microcomputer. If you spend a lot of time on CMS, however, and you do need to quickly access Internet information, several tools may be of help.

Gopher

Typing **GOPHER** on CMS will run the CMS Gopher client and connect you to the official UNT Gopher server. Navigating the Gopher menu structure is done easily by positioning your cursor over a menu item and pressing < ENTER >. If you press PF1 (< F1 > on most keyboards) you will see a help summary which explains the various PF key functions. You can open an alternate Gopher server by using the command **GOPHER address**, where **address** is the address of your target Gopher server. Entering the command **VMGOPHER**, will take you directly to a Gopher server running on CMS. Among other things you will find on this server is the current CMS system news. For more information about using Gopher on CMS, type **HELP GOPHER** from the Ready; prompt.

World Wide Web

You can browse World Wide Web pages on CMS by entering the command, **WWW**, or **WWW URL** if you wish to open a URL other than that of the official UNT Web page. Since CMS is a text-only environment, you will not be able to see any graphics associated with a particular Web page, however, if your disk space allows, you can download graphics and binary files to your CMS 191 (A) disk and then download them to a microcomputer using a binary FTP file transfer. Links are selected by placing your cursor over highlighted text and pressing < ENTER >. Pressing PF1 (< F1 > on most keyboards), you can receive a help summary for the WWW program. <>You can also enter **HELP WWW** from the CMS Ready; prompt and then press PF1 to receive a detailed explanation of the WWW command and all its options.

USENET News

USENET news is available on CMS via a program call NNR. You can simply type **NNR** at the Ready; prompt and you will see a listing of all the top-level News hierarchies (comp, rec, soc, unt, etc.). Placing your cursor over a particular hierarchy name and pressing PF4 (< F4 > on most keyboards) will show you a list of the different groups in that hierarchy, and the same process again will show you a list of the individual messages within a group. NNR has context sensitive help. Pressing PF1 will show you the available commands for whatever screen you are currently viewing. You can also enter **HELP NNR** from the CMS Ready; prompt for a more detailed description of NNR's commands and functions.

Once again, it is important to state that we do not recommend or support these CMS utilities as a primary Internet access point. For the CMS user who needs occasional quick access to Internet

resources, however, these programs can be quite handy. For more information about Internet access from CMS, contact the Computing Center Support Services Help Desk at 565-2324, and they can refer you to an Academic mainframe consultant.

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Jove, Growing and Improving

Jove, the primary academic UNIX system here at UNT, was recently treated to 15 software patches and 6 new disk drives. Files were migrated to a new 10G RAID-5 disk array in late September. Read [News on Jove](#) to keep up with planned maintenance and upgrades.

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Production Control Gets New Window

By Judith Evans, Production Services Manager (jevans@cc.admin.unt.edu)

A new window has been installed in Production Control for pick up of mainframe output by various campus departments - Advancement, Inventory and Parking - to name just a few. It is located just east of the ISB 119 entrance and is designed to decrease unauthorized traffic beyond ISB 119 and to increase control of sensitive reports and tapes. The window also allows easier access for the use of dollies.

The window opened on Monday, October 21, 1996. Reports will be available Monday through Friday between the hours of 8:00 a.m. to 12:00 p.m. and 1:00 p.m. to 5:00 p.m. We hope this change will improve service and relieve any confusion that might have existed previously.

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Information Resources Council News

Minutes provided by Sue Ellen
Richey, Recording Secretary



IRC Regular Voting Members: *Philip*

Turner, Associate Vice President of

Academic Affairs for Distance

Education and Dean of the School of

Library and Information Resources (Chair); Jenny Jopling, Instruction Program Group; Dennis

Mueller, Research Program Group; Don Grose, Libraries; Walter Bowen, Academic

Administration; John Todd, Faculty Senate; Kathleen Swigger, College of Arts and Sciences; Bill

Buntain, Communications Program Group; Cengiz Capan, College of Business; Joneel Harris,

Administrative Program Group; Paul Dworak, College of Music; David Hartman, School of

Community Services; Paul Schlieve, College of Education; Chuck Fuller, Fiscal Affairs; Carolyn

Cunningham, Student Affairs; Steve Oeffner, UNTHSC Information Technology Services; Steve

Miller, Human Resources; Clare Popejoy, Graduate Student Council; Steve Grant, UNT Health

Science Center; Brian Patridge, Student Association; Russ Pensyl, School of Visual Arts; Virginia

Wheless, Chancellor. IRC Ex-officio Nonvoting Members: Richard Harris, Computing Center; Coy

Hoggard, Computing Center; Maurice Leatherbury, Computing Center; Jim Curry, Microcomputer

Maintenance Shop; Rondel Stevens, Telecommunications; Sue Ellen Richey, Computing Center

(Recording Secretary)

June 18, 1996

E-mail Task Force

Bill Buntain reported for the E-mail Task Force that SCS had been brought up on GroupWise on June 17th. The next scheduled conversion is administrative services network, which is the General Services building and the Police Department. They are trying to fit the Library into the period between summer and fall terms, which will leave Arts & Sciences, nearly all of which is currently using Pegasus Mail. The real issue with Arts & Sciences is the need for additional support staff before conversion of that college; therefore, A&S is targeted for sometime in the Fall when there will be more staff available to help.

Ad Hoc Committee on Distributed Support

Bill also reported for the Ad Hoc Committee on Distributed Support that this committee has reached a phase where it can do no more and the larger working committee needs to be formed. He distributed a document dealing with the questions raised at the May IRC meeting. On the issue of accuracy in the numbers used to calculate distributed support needs, the committee felt "that its charge was to identify staffing shortages and recommend corrections for these shortages and that funding and resource allocation are more budgetary and administrative issues." The Committee did, however, "recognize that this is a serious issue and recommended that consideration be given to it by

the Information Resources Steering Committee." Bill said that the College of Education's numbers were revised, according to new figures given to him by that college. This adjustment does indicate a need for additional staff in the College of Education.

Bill explained that the committee had made its best effort to count accurately and felt that it was a good enough first attempt to address the shortages. In an attempt to refine the numbers, Bill discovered that in a comparison of Microcomputer Maintenance's numbers and Human Resources numbers, there was perhaps a difference of 1/4 FTE here or there. The amendment document states the Committee's recommendation "that the support model and the data collection methods used in developing its recommendations be reviewed by the Distributed Computing Support Management Team and that this new group be tasked with developing a model to plan for support needs in future years." There was further discussion of the issues, and a motion was passed stating that the report be accepted with the acknowledgment that there are varying circumstances within different schools that need to be addressed by the Provost, and that within budget limitations, there needs to be a full-time support staff person in each of the units. It was explained that in FY97 25% of the funding for the new positions will come from the school or college, and 75% from the Provost; in FY98 and succeeding years, 50% will be from school or college and 50% from the Provost.

Strategic Planning Committee

Richard Harris reported for the Strategic Planning Committee that work is in progress to consolidate all of the old computing policies into a new one. Susan Pierce has placed the draft of the new policies on the World Wide Web for people to review.

Software License Compliance Committee

Richard Harris reported that the Software License Compliance Committee had met, explaining that the charge of this committee was to investigate the issue of UNT's compliance with software licensing laws. A major effort to bring UNT into compliance was the purchase of campus-wide software site licenses. In a meeting of this committee on June 14th, the committee agreed to recommend to the IRC that responsibility and accountability for documenting software license compliance for each desktop machine (or server) be with the individual who has inventory responsibility for the machine and encourage this to be the faculty or staff member who uses the machine." Richard commented that Tim Edwards, who is a member of the committee, and an Internal Auditor, will be revising the Software Licensing Compliance Guidelines and will bring them to the IRC for approval at a later date. Following more discussion, it was agreed that there would not be a vote on this recommendation at the present time and that the issue will be presented to the IRC again as part of the Appropriate Use Policy.

Virginia Wheelless suggested that a form be developed by the Strategic Planning Committee which can be submitted to the IRC Steering Committee each time a recommendation is sent to them from the IRC. They can use the form to provide feedback to the IRC on issues presented to them.

July 16, 1996

New IRC Chair Announced

Dr. Brownell announced that the new Associate Vice President of Academic Affairs for Distance Education, and Dean of the School of Library and Information Resources, will be Dr. Phil Turner, who is currently in charge of distance education at the University of Alabama. Dr. Turner will begin

at UNT on September 1, 1996 and will assume Chairmanship of the IRC at that time.

Appropriate Use Policy Draft

Susan Pierce presented the Appropriate Use Policy and the System Administrator Code of Ethics she had drafted. Members were encouraged to send Susan their comments and suggestions which she will incorporate into the documents, new drafts of which will be presented to the IRC at its August meeting. Susan asked the IRC to consider the possibility of establishing a Board to review specific instances of breaches of the new policy. Susan explained that this policy would not appear in the official UNT Policy Manuals, but would be referenced there and would appear on the World Wide Web.

Research Program Group

Dennis Mueller reported that the Research Program Group had not met, but he proposed approval of a form Virginia Wheeless had brought forward at the last Strategic Planning Committee, which would aid the IR Steering Committee in giving the IRC feedback on issues it approves or actions it recommends. Since this was the first introduction of the suggested form, it was necessary to waive the IRC rules before a vote could be taken. With approval of the members present, the rules were waived that would have required a vote to be taken in the next meeting after the introduction of a new subject. A motion was introduced approving the suggested form for providing feedback from the Steering Committee to the IRC. In the discussion that followed, it was suggested that forms be prepared on any outstanding issues dating back to the beginning of the current academic year. Susan Pierce noted that she had already prepared forms for the 3 outstanding issues she was aware of:

1. Innovative Projects Proposal;
2. the recommendation to extend the fiber optic backbone; and
3. the adoption of the world wide web publishing policy.

A friendly amendment to the original motion to approve the form was accepted which specified that outstanding issues dating back to December of 1995 be written up on the new form and presented to the IR Steering Committee for feedback. The amended motion passed.

Mainframe Computer Upgrade Proposal

In Joneel Harris' absence, Coy Hoggard presented a proposal to upgrade UNT's IBM Mainframe Computer, with a vote to be taken at the August meeting. Coy then explained the proposal giving the history of the most recent mainframe acquisition. The current machine has been reliable, has resulted in the projected cost savings being realized, and has supported the academic mainframe-based workload well, including allowing an upgrade to the current version of the operating systems used for academic support. It also provides acceptable response times most of the time, but problems have been experienced during really heavy workload times such as registration. Coy explained that an upgrade after 18 months (mid January, 97) was anticipated even at the time of the most recent machine acquisition. However, IBM has presented UNT with an offer that makes it desirable to upgrade in December, 1996, and accept a "loaner" machine (fast, but older technology) from IBM during August to get through the Fall 1996 registration.

Ginny Anderson spoke to the group about the problems experienced during registration that led to consideration of this proposed upgrade. She stated that it appears that continually increasing work load on the mainframe is responsible for the response time difficulties. Discussion followed.

In response to a question, Coy stated that, as requested by the IRC, he and his Administrative teams have been pursuing distributed computing alternatives with one project for automation of the

purchasing function already under way. He assured the Council that he and his staff are looking into alternatives for administrative computing, but that any projects that are converted to client-server applications will take quite a while to change over.

Strategic Planning Committee

Richard reported that the Strategic Planning Committee had met and approved a charge and composition of a task force to direct the development of the University Campus wide Information System. He explained that Computing Center employee Doug Bateman is a resource person and acts as technical Web Master, but he could not serve as UNT's official Web Master. Richard explained that this team of people would not be doing all of the work; the job of developing web pages university-wide will require hundreds of people. This task force would consist of key people who could meet on short notice and provide leadership. Walter Bowen moved to waive IRC rules of order; Paul Schlieve seconded, and the SPC proposal was presented for approval at this meeting, rather than wait until August to take a vote. A vote was taken and the charge and composition of the new task force was approved.

Distributed Computing Committee Established

Maurice Leatherbury announced that the IR Steering Committee took action on the establishment of a Distributed Computing Committee, of which he is Chair. It was also announced that new positions for distributed computing support were approved and the new positions for Arts & Sciences are set to begin in August.

August 20, 1996

David Shrader Expresses Gratitude

Since this was David Shrader's last meeting as Chair of the IRC, he thanked the group for their work during the time he has served, and expressed his pleasure in serving in that position over the past year. Dr. Phillip Turner will assume the position as Chair of the IRC in September.

Mainframe Computer Upgrade

Joneel Harris made a presentation to propose the upgrade of the mainframe computer, a supporting document for which was distributed via E-mail prior to the meeting. Joneel briefly reviewed the history of the purchase of the current mainframe (9672 R51) which was purchased in support of administrative as well as academic computing needs, at a cost of \$2 million over 36 months, and included a trade-in allowance of \$85,000 for the old mainframe. She reported that the 9672 R51, although a reliable machine with adequate processing capacity, had experienced response-time problems.

On behalf of the Administrative Program Group, Joneel recommended that the IRC approve an upgrade to a third generation CMOS Mainframe with individual processors rated at 39-42 MIPS. This alternative will result in an 18-month extension of the existing 36-month ESO agreement, to a full 54-month term (July 10, 1995 to January 10, 2000. Part of IBM's offer is to provide UNT with a 9121-621 machine to use for 30 days to get through the August processing crunch resulting from Fall registration as well as end-of fiscal year processing.

Under this scenario, the academic workload running on the R51 will continue running on that

machine through Fall 1996 registration. After this crunch period the R51 will then resume processing for both administrative and academic activities until the new machine is delivered and installed in December 1996.

The total cost of the 54-month ESO under this option is \$2,787,150 million, \$786,435 more than the cost of the existing 36-month ESO. This results in a net increase of only \$316,754 in the 5-year costs as compared to the projected costs in the event of retaining the HDS 8083 and IBM 440 for five years and not installing the R51 (that is, doing nothing), and \$346,882 more than the estimated cost of retaining the existing R51 and letting the current ESO expire at the end of the current term. It was noted that the internal audit office has reviewed and approved the cost analysis.

As a result of a request by the IRC, much research has been done in a review of administrative applications and possible client-server software to replace some of the mainframe applications, in an effort to reduce the mainframe processing load. None of the vendors interviewed have production-ready systems. There are some in various stages of testing, but at this point it is not practical to consider replacing all mainframe-based student systems with client-server products.

Joneel explained that the loaner equipment is already in place, which was strongly endorsed by the Administrative Program Group, Enrollment Management Committee, and Associate dean's Council, as well as approved by Phil Diebel. If the IRC does not approve the recommendation being presented, UNT will be charged \$52,000 for the use of the loaner mainframe. She further explained that if the recommendation is approved, no additional funding will have to be approved, because the amount needed can be covered by the Computing Center's HEAF and M&O budgets.

In further discussion, Joneel Harris stated that this upgrade does not guarantee that future upgrade will not be necessary as technology and needs change. There was a call for the question, and the motion was passed by a majority vote of the members present.

World Wide Web Policy

Richard distributed a draft of the World Wide Web policy, reporting that the policy was approved by the IR Steering Committee after a few changes had been made, and was forwarded to Maurice Leatherbury, as head of the new Team Web committee. After a brief review of the changes that had been made to the document since it was last reviewed by the IRC, the IRC approved the policy.

GroupWise News

Richard Harris announced that the Library would be converted to Netware 4.1 and GroupWise in December. Harris reported having attended a meeting with Novell in which he learned that GroupWise (GW) 5.0 will be released soon and looks good. Novell has Web browser access now available which enables receiving, but not sending attachments from the Internet. A future version of GW 5 Web access will support the sending of attachments. The regular GW 5 remote client, which fully supports attachments, will allow UNT Internet connection in addition to direct GW dial-up.

Strategic Planning Committee

Richard Harris reported that the Strategic Planning Committee had met and primarily dealt with the issue of a risk analysis that is being required by the D.I.R. The initial plan was to outsource the analysis, but the committee concluded that it was more economical and logical to do the analysis in-house. He announced that Jonita Morrow of Risk Management and Environmental Services, as well as the Internal Auditors have agreed to help with the analysis, and they are in the process of naming other members of a group, which they will then ask the Chancellor to establish as a study team. The study team, after conducting the risk analysis, will prepare an analysis report and make

recommendations as to how to deal with any problems they find.

Standards & Cooperation Program Group

Paul Dworak distributed a chart showing the memory requirements for running various computing platforms, as well as a list of discussion points brought to the IRC from the Standards & Cooperation Program Group. Paul pointed out that in the group's discussion of memory requirements to run basic applications, it was determined that although an improvement was made by upgrading many computers across campus this year, one-half of all desktops on campus that are still not up to standard. Paul pointed out that funding for continual upgrading of machines across campus needs to be appropriated every year for this purpose. He said that he and the S&C Program Group will come back to the IRC with a proposal that will recommend a cost-effective way to keep up with this need for continual upgrading of machines. General discussion followed regarding funding resources and the formula for distribution of those funds was explained by Dr. Brownell. He asked that if funds need to be set aside each year for desktop computer upgrades, he would entertain a motion to that effect, and asked the IRC to give him a sense of the relative priority for the projects it recommends.

The Chair recommended that the subject of perpetual desktop computer upgrade funding be an agenda item at the September IRC meeting, with the Standards & Cooperation Program Group bringing an appropriate recommendation for achieving this.

IR Steering Committee

Blaine Brownell reported on two items that were forwarded to the IR Steering Committee:

1. the recommendation to combine the Computing Center, Telecommunications and Microcomputer Maintenance Shop under one department was approved by the Steering Committee and forwarded to the Chancellor, plans being already underway to combine Microcomputer Maintenance Shop and Computing Center. No recommendation was made to the Chancellor to have the CIO of these three areas report directly to him, however it was recommended that the Chancellor talk with other institutions about their reporting structure for these areas.
2. The Steering Committee considered the proposal for funds to be set aside annually from the University's HEAF allocation for the development of innovative projects, and referred the matter to the Provost with the recommendation that he consider allocating, on an annual basis, whatever resources he deems possible and appropriate from the HEAF allocation for research and instructional equipment. The Committee also recommended that the area for possible innovations be specified, given the inadequacy of available funds to cover all current needs. One use of funds given to innovative projects could be classroom improvements in the area of technology.

Another item considered by the Steering Committee was the Appropriate Use Policy, which is under consideration by the University Attorney. The Attorney is concerned about first amendment issues in regard to this policy.

The issue of whether or not building wiring should be considered a utility was also addressed by the Steering Committee, with agreement by all, except Fred Pole, who was not in attendance, that wiring should be considered an essential part of the building, much the same as plumbing and electricity.

Dial-up Lines Issues

Richard Harris reported that there have been complaints expressed since the number of free dial-up lines has been cut back to the original levels (prior to authorization of the premium lines) as

recommended by the IRC at its last meeting. Richard suggested that the IRC reconsider all of the different alternatives. Discussion followed, during which several suggestions were made. Bill Buntain explained that even if UNT gets out of the business of being an Internet provider, it will still have the cost of support to students using the Internet. In addition, Internet access from any source adds traffic to the T1 link between UNT and Dallas. Maurice Leatherbury pointed out that if UNT is no longer the Internet provider for UNT students, it also gives up its ability to restrict access. In addition, users cannot download the latest copy of Netscape (free to .EDU sites) from a commercial service, whereas they can through their connection with UNT.

It was suggested that the Communications Program Group and Academic Computing develop some alternatives for the IRC to review. In the meantime, the Chair told Richard Harris, Maurice Leatherbury and Bill Buntain that until a long-term plan is developed, they are empowered to deal with the situation as best they can.

September 17, 1996

New IRC Chair Introduced

Dr. Brownell introduced the new Chair of the IRC, Dr. Phillip Turner, who is Dean of the School of Library & Information Science, and Assoc. V.P. for Academic Affairs for Distance Education.

Strategic Planning Committee

Richard Harris reported for the Strategic Planning Committee that all members of the Risk Analysis Study Team have been named and have a target of completing their report in December unless that is not possible, in which case they will report on critical issues in December, and non-critical items later. The SPC met twice to work on the goals, objectives and strategies for the Strategic Plan and Susan Pierce electronically distributed a draft document prior to the meeting.

Discussion followed concerning ownership of classrooms for the purpose of upkeep of facilities, equipment and scheduling. Richard stated that this issue needs to be resolved before the plan is submitted to the state.

Blaine Brownell reported on a meeting he had with Phil Turner, Maurice Leatherbury, David Kesterson, and Mary Rubright specifically to deal with this issue. That group came up with some preliminary plans on how to address classroom equipment support and maintenance and who should take the leadership in this. The committee will be consulting with a variety of people and will attempt to resolve this issue as quickly as possible.

Joneel Harris explained that there is no centralized administrative source of funding or management to support 110 classrooms for equipment maintenance or replacement. A number of related problems related to this issue were discussed including the support of specific software for a variety of classes across campus, as well as more basic classroom needs like overhead projectors and chalk for blackboards. Brownell said his committee will strive to take the current environment into consideration rather than developing a new model for taking care of the situation, and they recognize the design problems that exist in newly renovated classrooms.

In the continuing discussion, it was mentioned that furniture in classrooms needs to be updated to something more contemporary. It was also noted that distance education classrooms need to be included right along with the plan for all classrooms with regard to maintenance and management.

The Chair asked Richard to have the SPC, together with the Instruction Program Group, work on the development of a strategic plan for educational technology in response to the Texas Higher

Education Coordinating Board guideline, but in conjunction with the Information Resources Strategic Plan.

Distributed Computing Support Management Team

Maurice Leatherbury reported that the Distributed Computing Support Management team has met since the last IRC meeting and discussed, in general, the relationship between distributed and centralized support areas on campus. The group agreed that a centrally staffed help desk is needed to handle front-line calls and answer simple questions, recognizing that in the academic areas the first line of support is the distributed support area. Problems that can't be resolved at the distributed level can be upgraded to people in the Computing Center who have higher levels of expertise.

The sub-committees working on network operating system management software packages, and desktop management software packages will bring recommendations back to the committee in November; and by the end of the fall semester the sub-committees working on call-tracking software system and desktop standardization will have recommendations to bring back to the group. Maurice announced that there is a Web site containing minutes and agendas for this committee's meetings, the URL of which is <http://www-lan.unt.edu/dcsmt/>.

Team Web

Maurice also reported that Team Web has met and looked at the structure of the top and second level web pages and made suggestions about the restructuring of the top level, discussing changes in design and wording. Maurice reported that PAIS is close to having the latest catalog on the web, and that the committee will be looking at the issues involved in the establishment of an "official" catalog on the web. Cengiz asked about registering various departmental sites with different search engines. Maurice reported that the Computing Center is putting up a new web server and with that there will be a new search engine. Once the machine is installed, procedures will be set up to exclude what is not wanted.

Standards & Cooperation Program Group

Susan Pierce reported that the Standards & Cooperation Program Group met to discuss a process by which UNT might address the need to keep desktop hardware up to date. They are discussing the funding issues involved with making large purchases from pooled resources. They are trying to define classes of computers, establish cost ranges, and determine how those can be re-visited annually to make sure they don't get out of date. The committee will continue working on this.

Research Program Group

Dennis Mueller announced that there are schools not represented on the Research Program Group and welcomed recommendations for new members. The Chair asked Dennis to send a memo to Deans of schools who are not represented and ask for new members to be assigned to the committee.

Administrative Program Group

Joneel Harris reported for the Administrative Program Group that they are preparing for a presentation by another vendor relative to client server technology in software/hardware for higher education. They continue to investigate new offerings to see what might be applicable to administrative applications at UNT.

Dial-up & Student Fee Issues

Kathy Swigger reported having been bombarded with complaints from students who do not access the General Access labs because they live out of town. These students are not happy because they are being charged a fee for dial-up remote services in addition to the other fees they pay, for services they don't use. They think that the dial-up service should be covered under the computer use fee they already have to pay.

Richard responded by saying that there is concern about this situation and assured Kathy and the group that basic assumptions upon which the fee structure is based are being revisited. Bill Buntain added that he had talked with the statewide director of Telecommunications at D.I.R., and based on that conversation, he believes UNT can reduce its cost for remote access service. He requested a month's time to re-evaluate the situation.

The Chair said that the IRC is going to have to deal with the whole issue of student fees, since for every type of fee, there are some students who pay it but don't get the benefits from it, for one reason or another. Everyone agreed that this is a philosophical issue that the IRC needs to address. Capan suggested that the issue be approached as two separate topics:

1. faculty using the dial-up service to do their jobs; and
2. students using the dial-up service for classwork.

Maurice commented that he has reviewed the services offered by 5 other Texas universities in comparison to UNT. He noted that UNT charges less for its services than any other university. Those universities that don't charge for dial-up services don't have computer labs on campus for their students. Kathy suggested that additional research be done to compare UNT with area community colleges, since that is a major source of competition for UNT. Discussion continued. Brownell commented that the Dallas Educational Center will need to be developed if UNT is serious about distance learning. There will need to be open connectivity through that center, although video-conferencing is the direction currently being taken.

One idea behind the premium service fee was that the Computing Center didn't want to recover any more than the incremental cost; the equipment expense already being covered in the Computing Center budget. It was suggested that it may make sense to look at reducing services in the general access labs in order to offset the cost of providing dial-up services. Capan stated that it would be good to set priorities to take care of the students already here before branching out further. Brownell pointed out that the Distance Education Task Force will soon be reactivated to look at the marketing issue and develop a distance education strategic plan.

The Chair suggested that a small group be charged to look at this whole general issue of fees, including dial-up; Brownell said the IR Steering Committee would appreciate advice on the subject of the fee structure. Joneel Harris suggested that the Administrative and Instruction Program Groups would be appropriate committees to look at the issue, possibly including Nora Bell's task force as well. The Chair stressed that the group will need to deal with both the philosophical issue of fees as well as administrative issues of charging fees, dealing with course numbers and legislative issues, and asked those two combined program groups to come back to the IRC with a report at the October meeting.

Paul Schlieve pointed out that Bill Buntain and his group in the Computing Center have put together the best Internet dial-up service available. He asked that the committees keep that in mind.

Brownell stated that, working on the assumption that it is going to cost UNT something, the committees need to deal with how UNT will recover whatever expenses are entailed by providing the off-campus services.

Adaptive Lab Facilities

Kathy Swigger reported that another issue that should be dealt with is the Adaptive Lab and the deficiency in the facilities available at UNT for disabled students. Capan reported that the General Access Lab is responsible for the Adaptive Lab and they have made some improvements in the facilities in the last year or so. Barbara Hall commented that even though GALC has done a lot, her view is that UNT has taken a reactive approach to disability accommodation whereas it needs to take a more proactive approach.

Innovative Projects program

In response to a question from Dennis Mueller, Blaine Brownell reported that funding has not been allocated specifically for the Innovative Projects program, and that they are still in the process of making budgetary allocations. Brownell also reported that the Appropriate Use Policy that had been submitted to the IR Steering Committee, is still under review by the University Attorney. He also reported that the Steering Committee agreed to fund the fiber project.

State Internet Connection

Bill Buntain reported that the Computing Center is working with the D.I.R. to re-architect the state Internet connection to improve reliability in UNT connection to the Internet.

School of Community Services

Barbara Hall introduced Michael Lynn and Richard Anderson who, together will represent the School of Community Services in her absence.

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The Network Connection

By [Dr. Philip Baczewski](#), Assistant Director, Academic Computing Services (baczewski@unt.edu)

*This column is a continuing feature of **Benchmarks** intended to present news and information on various aspects of wide area networks.*



Hold that Spam!

Because of a recent flurry of activity, you might have heard of, or been the recipient of an Internet e-mail Spam. No, I'm not talking about the receipt of a canned meat product via E-mail. In Internet terms, a Spam is the transmission of large volumes of unsolicited E-mail (although I was around when the Internet term was first used in this context, I have to admit to not remembering it's origin - perhaps "Spam" was used because the e-mail is often annoying, unwanted, and of undetermined origin). Many of the messages which can be considered Spams, are advertisements for some commercial endeavor (including what appear to be some get-rich-quick schemes).

Some people might consider this type of activity to be a legitimate Internet advertising practice, however, in most cases the negatives of this activity outweigh any possible positives. Spams are a bit like those flyers you sometimes find under your car's windshield wiper: they are distributed without regard to whether they will be of interest to the recipient; they interfere with normal operations; they often result in a mess that is left for someone else to clean up. One of my E-mail addresses has recently been the target of this kind of Spamming activity. Although these messages often say something like "...our research indicates that you would be interested in the following offer...", I have yet to find any of these messages to be the least bit interesting. Apparently their "research" stops after finding your E-mail address.

Spams are an annoyance when they show up in your mailbox (or possibly more than an annoyance if you pay for incoming E-mail), but they can often cause major problems for mailing list maintainers or E-mail postmasters because of the volume of E-mail they can initiate. One side effect of Spams is that people on mailing lists often reply to complain about a Spam posting to the list, and thereby just increase the amount of E-mail traffic for list members. I would contend that activity which interferes with peoples' access to Internet information is less than acceptable and I would include Spams in that category.

It's a Spam if...

So, what exactly is a Spam? A Spam is an E-mail message that is posted to numerous Internet electronic mailing lists or news groups disregarding the discussion purpose of those lists. A Spam is an E-mail message mailed to a large number of addresses (often in the thousands, but equally problematic for hundreds of addresses). A Spam is an unsolicited mass mailed E-mail message which offers commercial opportunities to those who have never made a direct request for such information.

Some people Spam unintentionally by assuming that just because several discussion groups relate to some common topic, all readers of that information would be interested in their particular piece of information. For example, you might make the mistake of thinking that all readers of the rec.music

news groups would be interested in information for performing musicians, where in reality, most readers of those groups would be classified as fans or devotees. A message to one of these news groups would be inappropriate a message to many or all of them would be a Spam.

Some people Spam intentionally by acquiring large numbers of Internet E-mail addresses, usually culled from the ranks of mailing list subscribers or news group posters. They then use these addresses to perform "marketing" of their product or service. If you send a large number of unsolicited E-mail messages all at once, then you may be a Spammer (some people might include in this category the sending E-mail of questionable universal interest to all employees of your organization). Since Internet technologies such as World Wide Web offer more appropriate and effective channels for the dissemination of commercial information, commercial E-mail Spams should definitely be discouraged.

What's an E-mailer to do?

If you wish to be an active participant in E-mail mailing lists and news groups there's not much you can do to keep your E-mail address from being discovered by Spammers. However, there are some steps you can take to protect yourself from being repeatedly Spammed. If you receive a mailing list message that you feel is inappropriate for the list's topic of discussion, reply to the message author (not to the list) politely and succinctly expressing your feelings and also bring it to the attention of the list moderator as well. Sometimes people don't realize that their message is inappropriate and a little education goes a long way.

If you receive an unsolicited commercial offering that you feel is inappropriate, you can reply to the sender requesting removal from any list they are maintaining. You can also send an E-mail message to the postmaster at the sender's Internet service provider to bring the inappropriate use to their attention. You will need to look at the E-mail message's header to find where the message originated, but once you do find the sender's Internet node address you can just add "postmaster@" before that node and most sites will accept mail to that address. For more information along these lines, see the "Stop Spam FAQ" web page at <http://just4u.com/webconsultants/spamfaq.htm>.

Spamming may soon become less frequent thanks to some legal remedies against Spamming. Arlene Rinaldi, in her Web page, "The Net: User Guidelines and Netiquette" (<http://www.fau.edu/rinaldi/net/index.htm>), provides the following information in her section on Electronic Communications:

Under United States law, it is unlawful to use any "telephone facsimile machine, computer, or other device to send an unsolicited advertisement" to any "equipment which has the capacity (A) to transcribe text or images (or both) from an electronic signal received over a regular telephone line onto paper." The law allows individuals to sue the sender of such illegal "junk mail" for \$500 per copy. Most states will permit such actions to be filed in Small Claims Court. This activity is termed "spamming" on the Internet.

A California court has already ruled on such a Spamming case. Published reports have stated:



...Cyber Promotions, Inc. and its president Sanford Wallace have been ordered by a federal judge to swear, under penalty of perjury, that they will cease engaging in conduct which causes the overload of Concentric's mail system and the denial of mail service to Concentric Networks' subscribers.

In a lawsuit filed against Cyber Promotions and Wallace on October 2, 1996, seeking an injunction, compensatory and punitive damages, Concentric alleges that the Defendants send unsolicited electronic advertisements, or "spam," to hundreds of thousands of Internet users on a daily basis and falsely designate a Concentric Network account as the point of origin of those messages.

This case is typical of how many Spammers operate and Internet service providers are becoming more and more diligent about discouraging their own subscribers from engaging in Spamming activity as well as pursuing action against those who send Spams purporting to be from their service. This is why it's important to let the appropriate service provider know if you feel that you have received one or multiple such unsolicited messages. It's important to note that the legal remedies cited above are civil and not criminal. If you receive a Spam, don't expect your local police to send a squad car out to investigate.

In some ways, Spams are like the junk mail that the Post Office brings you. It's sometimes easiest to just throw it away. You can request to be removed from a particular mailing list if you can find the list's origin. If you find the content to be particularly objectionable, you can bring that to the attention of the mail's source and if you suspect illegal business practices, you can always bring it to the attention of the Attorney General's office of the State from which it apparently originated. Hopefully, however, as people become more educated about the negative ramifications of Spamming, this activity will become almost non-existent on the Internet.

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List of the Month

Each month we will highlight one BITNET, Internet, or USENET Special Interest Group (SIG) mailing list. This month's list...

TOURBUS

TOURBUS is an Internet mailing list brought to you by the team of Patrick Douglas Crispen, creator of the popular ROADMAP series and "Doctor Bob" Rankin, columnist for Boardwatch Magazine and author of "Accessing The Internet By E-Mail".

TOURBUS is a text-based tour of some of the coolest sites on the Internet. Patrick and Bob serve as your tour guides, not only giving you the sites' addresses but also an inside look at what actually makes each TOURBUS stop "cool".

You can see back issues of the TOURBUS postings by visiting the TOURBUS Web Site at:
<http://csbh.mhn.net/~bobrankin/tourbus>

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